

REMARKS

The March 10, 2005 Office Action has been carefully considered. A petition is filed concurrently herewith requesting withdrawal of the premature finality of that Action. Several claims (17, 20, 21, 28 and 29) are cancelled above. The limitations of claim 17 have been moved up into independent method claim 16. A similar amendment has been made in independent program claim 26. Claim 17 is cancelled in view of the amendment of claim 16, whereas other claims are cancelled to reduce issues. Such amendments should not raise new issues or require further search or consideration, in view of the previous presentation of the limitations in dependent claim 17. It is believed that this amended application is allowable, as discussed more below. However, even if not allowable, it is believed that the amendments above substantially reduce issues for purposes of Appeal. Entry of the amendments to the claims, either as a matter of right upon withdrawal of finality or under Rule 116, is respectfully requested. Prompt favorable reconsideration based on the amended set of claims is earnestly solicited.

Claims 16-19, 26 and 29 were rejected under 35 U.S.C. § 103 as unpatentable over US patent no. 4,485,486 to Webb et al. (hereinafter Webb) in combination with US patent no. 6,611,511 to Schulz, further in combination with newly cited US patent no. 5,952,963 to Shen et al. (hereinafter Shen).

Claim 16 now includes limitations previously recited in claim 17 and should have essentially the same scope as the previous version of claim 17. Claim 29 has been cancelled. This first rejection is respectfully traversed with regard to claims 16, 18, 19 and 26.

The independent claims in this group, that is to say claims 16 and 26, both require selecting one of three possible types of hand-off, based on the assessment of the movement of the mobile station based on the calculated rates of signal changes. The Examiner correctly

recognized that the combination of the Webb and Shulz patents does not teach controlling hand-off based on calculated rates of signal changes. Instead, the new art rejection of these claims alleged that Shen would lead one of skill in the art to perform antenna selection in the proposed combination of Webb and Schultz using a selection criteria based on the rate of signal changes. It is respectfully submitted that, even if Shen teaches some use of calculated rates of change, Shen does not teach selection of one of three possible types of hand-off in response to the assessment of the movement of the mobile station based on the calculated rates of signal changes.

In addressing previous claim 17, the rejection points to disclosure of different handoff types (hand-off between antennas of different sectors, and handoff between adjacent cells) in Webb. However, Webb controls hand-off based on detected signal strength. Shulz teaches changing antenna configuration based on a where a mobile station is found (column 4, lines 1-21), and Shen teaches selecting an antenna from a diversity of antennas based on multiple criteria, including a gradient error vector, which represents the magnitude of the received signal's rate of change. It is respectfully submitted, however, that none of the three cited patents actually teaches selecting one of three possible types of hand-off, based on the assessment of the movement of the mobile station based on the calculated rates of signal changes, as claimed.

For these reasons, Applicants submit that the combination of Webb, Schulz and Shen still would not result in a method which involves selecting one of three possible types of hand-off, based on the assessment of the movement of the mobile station based on the calculated rates of signal changes. Hence, independent claims 16 and 26 patentably distinguish over the applied documents, and dependent claims 18 and 19 distinguish in the same manner.

It is also submitted that the combination of Webb, Schulz and Shen would not have been obvious in the sense of 35 U.S.C. § 103. In particular, there is nothing in the cited documents that would lead one of skill in the art to combine them all together in the proposed manner. The base patent to Webb relates to early 80s cellular telephone technology. By contrast, Schulz relates to CDMA technology, and Shen relates to DECT, PWT or TDMA type systems. Webb and Schulz relate to sectorized antenna systems, whereas Shen focuses on antenna diversity. It is respectfully submitted that there is nothing that would suggest to one of skill in the art to look to the teachings of Schulz and Shen to modify Webb, except for Applicants' claims. Absent some express suggestion or readily apparent motivation in the art, the combination of such diverse teachings would not have been obvious. For this additional reason, claims 16, 18, 19 and 26 should be patentable.

Claim 27 was rejected under 35 U.S.C. § 103 as unpatentable over Webb, Schultz and Shen, further in combination with US patent no. 5,023,900 to Tayloe et al. (hereinafter Tayloe). This rejection cited the Tayloe patent for a disclosure of determining the location of a mobile station and use of a coverage map. The patent actually teaches measurement of signal strength and timing, at a base station, to determine mobile station position (column 3, lines 46-50). By tracking location and monitoring signal strengths during calls, Tayloe develops a map of coverage characteristics (column 5, lines 19-27). Tayloe relates to systems diagnostics (see title). For diagnostic purposes, Tayloe maps system coverage from tracking of mobile positions. Tayloe does not teach use of the map to determine mobile station location. It is submitted that the development of a coverage map for system diagnostic purposes (Tayloe) would not lead one of skill in the art to modify the Webb, Schultz and Shen technology to actually determine the location of a mobile station by comparing received signal strength from at least one sector

antenna against a cell-site signal coverage profile. Hence, the four applied patents do not in fact teach all of the subject matter of claim 27.

It is also submitted that the four-way combination of Webb, Schulz, Shen and Tayloe would not have been obvious in the sense of 35 U.S.C. § 103. The rejection proposes three different modifications of the basic Webb system. The only reason for arbitrarily selecting disparate teachings from many different references is to reconstruct the Webb system to approximate Applicants' claim 27. The law does not permit the Patent Office to use Applicants' claim as a roadmap in this manner. It is respectfully submitted that such a hindsight reconstruction of the claim, without benefit of an actual motivation provided by the art, is improper under the relevant legal standards. The combination would not have been obvious.

For the reasons discussed above, the applied patents do not teach all of the requirements of claim 27 and the proposed combination of four patents would not have been obvious to a person of skill in the art. Hence, claim 27 should be patentable over the patents applied in the rejection.

Claims 20, 21 and 28 were rejected under 35 U.S.C. § 103 as unpatentable over Schulz in combination with US patent no. 5,794,153 to Ariyavisitakul et al. This rejection is moot, in view of the cancellation of claims 20, 21 and 28.

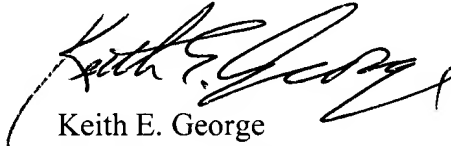
Upon entry of the above claim amendments, claims 16, 18, 19, 26, and 27 remain active in this application, all of which should be patentable over the art applied in the latest Office Action. It is submitted that all of the claims are in condition for allowance. Accordingly, this case should now be ready to pass to issue; and a prompt favorable reconsideration of this matter is requested.

It is believed that this response addresses all issues raised in the March 10, 2005 Office Action. However, if any further issue should arise that may be addressed in an interview or an Examiner's amendment, it is requested that the Examiner telephone Applicants' representative at the number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Keith E. George", with a stylized flourish at the end.

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